

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A perpendicular magnetic recording medium, comprising:
a substrate;
a soft magnetic underlayer formed on the substrate;
arrayed soft magnetic dots formed on the soft magnetic underlayer;
a nonmagnetic layer formed on the soft magnetic dots; and
a ferromagnetic recording layer formed on the nonmagnetic layer soft magnetic dots
and having magnetic anisotropy in a direction perpendicular to a surface of the substrate.

2. (Canceled).

3. (Currently Amended) The perpendicular magnetic recording medium according to claim [[2]] 1, wherein the nonmagnetic layer is embedded between the adjacent soft magnetic dots, a surface of the nonmagnetic layer being substantially flat.

4. (Original) The perpendicular magnetic recording medium according to claim 1, wherein the soft magnetic underlayer and the soft magnetic dots are in contact with each other.

5. (Original) The perpendicular magnetic recording medium according to claim 1, further comprising a nonmagnetic layer having a thickness of 10 nm or less between the soft magnetic underlayer and the soft magnetic dots.

6. (Original) The perpendicular magnetic recording medium according to claim 1, wherein a thickness of the soft magnetic dots is 100 nm or less.

7. (Original) A perpendicular magnetic recording medium, comprising:
a substrate;
a soft magnetic underlayer formed on the substrate;
a nonmagnetic layer formed on the soft magnetic underlayer;
a ferromagnetic recording layer formed on the nonmagnetic layer and having magnetic anisotropy in a direction perpendicular to a surface of the substrate; and
arrayed soft magnetic dots formed on the ferromagnetic recording layer.

8. (Original) The perpendicular magnetic recording medium according to claim 7, further comprising a nonmagnetic layer between the ferromagnetic recording layer and the soft magnetic dots.

9. (Original) The perpendicular magnetic recording medium according to claim 7, wherein a thickness of the soft magnetic dots is 100 nm or less.

10. (Original) A perpendicular magnetic recording medium, comprising:
a substrate;
a soft magnetic underlayer formed on the substrate;
a nonmagnetic layer formed on the soft magnetic underlayer;
arrayed ferromagnetic recording regions defined by grooves engraved in a ferromagnetic layer formed on the nonmagnetic layer, the ferromagnetic recording regions having magnetic anisotropy in a direction perpendicular to a surface of the substrate; and

arrayed soft magnetic dots formed on the respective ferromagnetic recording regions.

11. (Original) The perpendicular magnetic recording medium according to claim 10, further comprising a nonmagnetic layer between the ferromagnetic recording regions and the soft magnetic dots.

12. (Original) The perpendicular magnetic recording medium according to claim 10, wherein a thickness of the soft magnetic dots is 100 nm or less.

13. (Original) The perpendicular magnetic recording medium according to claim 10, wherein a depth of the grooves is smaller than a thickness of the ferromagnetic layer.

14. (Original) The perpendicular magnetic recording medium according to claim 10, wherein the grooves reach the nonmagnetic layer.

15. (Original) A perpendicular magnetic recording medium, comprising:
a substrate;
a soft magnetic underlayer formed on the substrate and having arrayed projections on a surface thereof opposite to the substrate;
a nonmagnetic layer formed on the soft magnetic underlayer; and
a ferromagnetic recording layer formed on the nonmagnetic layer ~~soft magnetic underlayer~~ and having magnetic anisotropy in a direction perpendicular to a surface of the substrate.

16. (Canceled).

17. (Original) The perpendicular magnetic recording medium according to claim 15,
wherein a height of the projections is 100 nm or less.